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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/130,818	08/07/1998	YOSHIYUKI TANAKA	5702D-6844	6857

26021 7590 09/04/2003

HOGAN & HARTSON L.L.P.  
500 S. GRAND AVENUE  
SUITE 1900  
LOS ANGELES, CA 90071-2611

EXAMINER

ROBERTSON, DAVID L

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/130,818

Applicant(s)

TANAKA ET AL.

Examiner

David L. Robertson

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 13-17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 13-16 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10, 17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 14 November 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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This Office action is in response to the RCE filed July 14, 2003.

The significant corrections to the specification, filed with the amendment of July 14, 2003 are noted. However, the explanation concerning figures 17 and 18 as found in the specification remains deficient. Further, the explanatory remarks do not clarify matters any. Because the subject matter in these figures is not a part of any of the claims, and because applicants clearly are unable to describe the noted subject matter in sufficient detail as to render it comprehensible, the examiner hereby requires that said subject matter be cancelled as lacking substantial correspondence with the claims (see 37 C.F.R. § 1.121(e)).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10, 17, 19 and 20 rejected under 35 U.S.C. 102(e) as being anticipated by Shinohara (U.S. 5,905,993). The particulars of this rejection can be found in the Office action mailed July 26, 2002 on page 3, and are incorporated herein by reference.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinohara (U.S. 5,905,993) in view of applicants' admitted prior art. The particulars of this rejection can be found in the Office action mailed July 26, 2002 on pages 3-4, and are incorporated herein by reference.

Applicants' arguments filed July 14, 2003 have been fully considered but they are not persuasive. With respect to applicants' comments on figures 17 and 18, the arguments do not make any sense in view of the well known operation of flash memory cells. First, to change a cell from a "1" to a "0" usually takes significantly more than "an electron." Second, the meaning of "the horizontal axis represents the number (frequency of occurrence) of the memory cell" does not follow. Note that when a flash memory is <sup>2, erased</sup> erased, ALL of the cells become level "1." Third, "the electron is injected into the memory cell with three levels and drawn with one level" is total gibberish. With respect to the rejection of the claims, note that applicants state that applicants' method "provides in the translation table two levels of address information to identify the location of the targeted physical block." (See page 47.) This is completely irrelevant, as the specification does not provide support for two levels, and more importantly, the claims do not recite two levels of address information. For example, claim 10 recites a method for use in a

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system which includes “logical blocks,” “physical blocks,” “redundant divisions,” “physical block areas,” where the method includes “preparing a logical/physical address translation table.” Nothing in the claim refers to or requires two levels of address information, thus applicants’ arguments are unconvincing. Applicants’ comments regarding claims 17 and 19-21 are equally deficient. They allege differences that are not distinguishable from the applied prior art.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**Any response to this action should be mailed to:**

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Commissioner for Patents

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P.O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

(703) 746-7238, (for formal after final communications to Technology Center 2100; please mark "EXPEDITED PROCEDURE");

**or faxed to:**

(703) 746-7240 (for informal or draft communications to Technology Center 2100, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA; Sixth Floor (Receptionist).

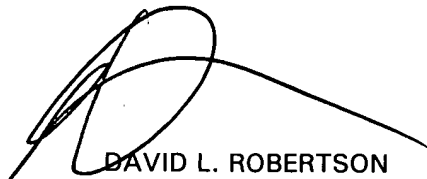
Any inquiry of a general nature or relating to the status of this application should be directed to the technology center receptionist whose telephone number is **(703) 305-3900**.

Direct any inquiries concerning drawing review to the Drawing Review Branch (703) 305-8404.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Robertson whose telephone number is (703) 305-3825.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached at 305-3821. **The fax number for Technology Center 2100 for Official communications is (703) 746-7239.**

Communications which are not application specific may also be posted on e-mail at [David.Robertson@USPTO.gov](mailto:David.Robertson@USPTO.gov).



DAVID L. ROBERTSON  
PRIMARY EXAMINER  
AU 2186